The Department of Public Works, Water Division is pleased to present our customers this Water Quality Report. This report fulfills an Environmental Protection Agency requirement to provide a "Consumer Confidence Report" to all customers receiving water from a public system. The intent of this report is to inform you about the quality and the services we provide to our customers 24 hours per day, seven days a week.

This report details the origin of your water, the contents of your water, and how it compares to the quality standards mandated by the federal government. Our professional staff of employees is trained and committed to the provision of safe drinking water through routine sampling of tap water that exceeds Health Department requirements and the prudent use of water revenues to maintain the system.

Your water system is comprised of two service areas as required by regulation. Potowomut System & Warwick System.

With the exception of the Potowomut area, one hundred percent of the water is purchased directly from the Providence Water Supply Board that is a surface water supplier. As the report will indicate, water for the Potowomut system is purchased from Kent County Water Authority that originates from groundwater (wells) and surface water (reservoir). Finally, Warwick wholesales water to Kent County Water Authority at their connection on Quaker Lane via a 42" line owned and maintained by the City of Warwick.

> For more information, call Water Division at 738-2000, Ext. 6600 **EPA Safe Drinking Water Hotline** (800) 426-4791

Warwick Department of Public Works Water Division and its predecessor commission have been delivering safe, dependable water, 7 days a week, 24 hours a day for over 65 years.

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals, radioactive material and can pick up substances resulting from the presence of animals or human activity.

All sources of drinking water are subject to potential contamination by substances that are naturally occurring or man-made. These substances can be microbes, inorganic or organic chemicals and radioactive substances. All drinking water, included bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants. people with HIV/AIDS or other immune system disorders, some elderly and infants can be particularly at risk from infections. These people should seek advice about drinking water from their healthcare providers. EPA/CDCV guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from Safe Drinking Water Hotline.

Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, you should ask advice from your healthcare provider

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Warwick Water is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at www.epa.gov/safewater/lead

MCL's are set at very stringent levels. To understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters of water every day, at the MCL level, for a lifetime to have a one-in-a-million chance of having the described health effect.

In our continuing efforts to maintain a safe and dependable water supply, it may be necessary to make improvements in your water system. The costs of these improvements may be reflected in your billing. Rate adjustments may be necessary in order to address these improvements.

We ask that all our customers help us to protect our water sources, which are the heart of our community, our way of life and our children's future.

The Keny County Water Authority purchases approximately 90 percent of your water from the Providence Water Supply Board. This supply is treated surface water from the following reservoirs located in the central part of the state: Scituate, Regulating, Moswansicut, Ponaganset, Barden and Westconnaug reservoirs. The remainder of your water is produced from our Mishnock well field and treatment facilities located off Route 3 in Coventry and our East Greenwich well located off Post Road at the Warwick and East Greenwich line. KCWA also wholesales water to the City of Warwick to supply the Potowomut section.

> Visit the EPA's drinking water website: www.epa.gov/safewater

# Warwick Water Service Area **FACTS & FIGURES**

Number of Services: 26,900 Distribution Mains: 380 Miles



Valves: 5.100 Hydrants: 1,975

Transmission Mains: 18 Miles Storage Capacity: 12,500,000 gals

Annual Customer Usage: Approx. 2.0 billion gallons Year

El informe contiene informacion importante sobre la calidad del aqua en su comunidad. Traduzcalo o hable con alguien que lo entienda bien.





WARWICK DEPARTMENT OF PUBLIC WORKS

DIVISION OF WATER 935 Sandy Lane Warwick, RI 02886

# REPORT 2014 City of Warwick Scott Avedisian, Mayor DEPARTMENT OF PUBLIC WORKS DIVISION OF WATER

935 Sandy Lane • Warwick • RI • 02886 (401) 738-2000 Ext. 6600

CONSUMER CONFIDEN

BEBBA TENS

AS REQUIRED BY THE ENVIRONMENTAL PROTECTION AGENCY,
A DEPARTMENT OF THE U.S. GOVERNMENT

How do I read IT'S EASY! These tables show the results of our water-quality analyses. Every regulated contaminant that we detected in the water, even on the most winder these contaminant that we detected in the water, even on the most minute traces, are listed here along with the highest levels allowed by regulation (MCL), the ideal goals for public health, the these tables? amounts detected, the usual sources of each contamination, footnotes, explaining our findings and a key to units of measurement.

## Our Potowomut customers are supplied by the Kent County Water Authority. This table represents the Kent County results.

The tables list all of the drinking water constituents detected during the calendar year of this report. The presence of those constituents found in the water at the time of testing does not necessarily indicate that the water posses a health risk. Unless otherwise noted, the data presented in these tables are from testing done in the calendar year of the report. In some cases, the EPA and the State may require us to monitor for certain constituents less than once per year because the concentrations of these constituents do not

Kent County Water Authority routinely monitors for constituents in your drinking water in compliance with federal and state laws. This table shows the detection results from the numerous monitoring tests conducted for the period January 1, 2014 to December 31, 2014. The tables of "Testing Results" identify those constituents that were "detected" in both the Kent County Water Authority and Providence Water Supply sources. As authorized by the EPA, the state has implemented reduced monitoring requirements for certain contaminants to less often than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of our data, though representative, is more than one year old.

 REGULATED DETECTED												
REGULATED												
CONTAMINANT	PERIOD	UNIT	MCL	MCLG	LEVEL	RANGE	MAJOR SOURCES	VIOLATION				
BARIUM <sup>1, 2</sup>	2014	ppm	2	2	0.009	0.006-0.009	Erosion of natural deposits.	NO				
CHROMIUM <sup>2</sup>	2014	ppb	100	100	5	0.24-5	Erosion of natural deposits.	NO				
FLUORIDE1	2014	ppm	4	4	3.45	0.26-3.45	Erosion of natural deposits. Water additive, which promotes strong tee					
NITRITE <sup>1</sup>	2014	ppm	10	10	3.7	0.06-3.7	Erosion from natural deposits. Leaching from septic tanks; sewage runoff from fertilizer use.	e; NO				
TOTAL COLIFORM BACTERIA <sup>5</sup>	2014	Monthly Max %	Presence of Colforn bacteria in >5% of monthly samples	0%	2%	0-2%	Naturally present in the environment.	NO				
TURBIDITY <sup>1,4</sup>	2014	NTU	TT	NA	0.40	0.02-0.40	Soil runoff.	NO				
TOTAL ORGANIC CARBON <sup>1,3</sup>	2014	N/A	TT	NA	1.36	1.26-1.58	Naturally present in the environment.	NO				
CHLORINE FREE RESIDUAL	2014	ppm	4	4	0.53	0.48-0.62	Water additive used to control microbes.	NO				
TOTAL TRIHALOMETHANES (TTHM)	2014	ppb	80	NA	66	46-86	By-product of drinking water chlorination.	NO				
HALOACETIC ACIDS (HAA5)	2014	ppb	60	NA	35	17-72	By-product of drinking water chlorination.	NO				

TAP WATER SAMPLES WERE COLLECTED FOR LEAD AND COPPER ANALYSES FROM SAMPLE SITES THROUGHOUT THE SYSTEM.

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED			90th PERCENTILE DETECTED			VIOLATION
COPPER (ppm)	2014	1.3	1.3	0.019	0 of 12 samples was above the action level	Corrosion of household plumbing systems. Erosion of natural deposits.	NO
LEAD (ppm)	2014	0.15	0	5	0 of 12 samples	Corrosion of household plumbing systems. Erosion of natural deposits.	NO

### Kent County Water Authority Table Footnotes

- Detection level influenced by Providence Water purchases.
- Reflects sampling at groundwater source before blending with purchased water from Providence Water Supply Board.
- In order to comply with the EPA standard, the removal ratio must be greater than 1. Detected level is the lowest removal ratio per guarter. Range is the lowest and highest removal ratios per month
- 4 0.40 was the highest single turbidity measurement recorded. The lowest monthly percentage of samples meeting the turbidity limit was 100%. The average turbidity value for 2014 was <0.10 NTU.
- This value refers to the highest monthly percentage of positive samples detected during the year. For 2013, Warwick Water collected 102 samples for Total Coliform Rule compliance monitoring.

REGULATED	LATED DETECTED									
CONTAMINANT	PERIOD	UNIT	MCL	MCLG	LEVEL	RANGE	MAJOR SOURCE		VIOLATION	
Regulated Substances										
BARIUM	2014	ppm	2	2	0.007	NA	Erosion of natural	deposits.	NO	
CHLORINE (as C12); Free Residual) <sup>5</sup>	2014	ppm	MRDL=4.0	MRDLG=4.0	1.92	0-1.92	Water additive use	d to control microbes.	NO	
FLUORIDE	2014	ppm	4	4	3.45	0.55-3.45	Erosion of natural strong teeth.	deposits. Water additive which promotes	NO NO	
HALOACETIC ACID (HAAS)⁵	2014	ppb	60	0	25.8	4.9-34.0	By-Product of drink	king water chlorination.	NO	
TOTAL COLIFORM BACTERIA <sup>1</sup>	2014	% of Positive Samples/Mo.	Presence of Coliform bacteria in >5% of the monthly samples	0%	1.0	0-1.0%	Naturally present in	n the environment.	NO	
TOTAL ORGANIC CARBON (TOC) <sup>2</sup> (Removal F	tatio) 2014	N/A	TT	NA	1.05	0.90-1.51%	Naturally present in	n the environment.	NO	
TOTAL TRIHALOMETHANES (TTHM)5	2014	ppb	80	0	68.3	35.0-77.0	By-Product of drink	king water chlorination.	NO	
TURBIDITY <sup>3</sup>	2014	NTU	TT	NA	0.40	0.02-0.40	Soil runoff.		NO	
Lead and Copper										
COPPER	2014	ppm .	Action Level = 1	.3 1.3	0.032	NA		ehold plumbing systems. Erosion of sites out of 0 were above 1.3 ppm.	NO	
LEAD⁴	2014	ppb .	Action Level = 1	5 0	16.0	NA	Corrosion of household plumbing systems. Erosion of natural deposits. 3 site out of 33 were above 0.15 ppb.		NO	
Unregulated Substances										
SODIUM	2014	ppm	NA	NA	12.0	NA			NO	
STRONTIUM	2014	ppb	NA	NA	28	26-28			NO	
VANADIUM 4-ANDROSTENE-3.17-DIONE	2014 2014	ppb	NA NA	NA NA	0.42	0.28-0.42			NO NO	
r Quality Table Footnotes	2011		ting Water Defi		0.00002	0 0.00002	T 11 T	nit Descriptions		
value refers to the highest monthly processing of possible samples claded using the year: For 2014, Mannick Walter collected 1,207 samples for Coliforn Fulle consiplance monitoring. Fire (5) of these samples were twee for total coliforn bacteria. Item to the coliforn bacteria. Item to the coliforn bacteria, the removal ratio must be greater 1. Detected level is the lowest removal ratio per quarter. Range is the standing-level removal ratio per quarter. Range is the NTU was the highest single burboilty measurement recorded. The lowest this processing of the process			m Contaminant Level (i gighest level of a contain to the MCLG's as feas in Contaminant Level C evel of a contaminant in to health. MCLG's allow evel (AL): concentration of a contain	ninant that is alk ible using the be coal (MCLG): drinking water if of or a margin of	est available treated below which the safety.	atment technology. re is no known or e:	MCLG ppb pCi/L TT	Action Level Maximum Contaminant Level Maximum Contaminant Level Goa Parts per billion, or micrograms pe Piccuries per liter (a measure of re Treatment Technique Nephelometric Turbidity Units	er liter	

A required process intended to reduce the level of a contaminant in drinking water

State or EPA permission not to meet an MCL or a treatment technique under certain

NA

ND

MDL

HA

Not Applicable

None Detected

Health Advisory

Method Detection Limit

MRDI Maximum Residual Disinfection Level

MRDLG Maximum Residual Disinfection Level Goal

Treatment Technique (TT):

Variances and Exceptions:

average turbidity value for 2014 was < 0.10 NTU.

<sup>4</sup> For 2014, Warwick Water did not have an exceedence of the lead action level.

range is based upon lowest and highest individual measurement.

<sup>5</sup> Compliance is based upon the highest quarterly running annual average and

6 Unregulated substances are those that don't yet have a drinking water standard

set by USEPA. The purpose of monitoring for these contaminants is to help

USEPA decide whether it should establish a standard for these contaminants.